

The Separation of Ownership and Control: An Austrian Perspective

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1. Introduction

Increasing global competition has recently focused research efforts on the analysis of the effects of countries' corporate governance systems on the performance of their financial and product markets. However, most of the existing work is restricted to the exploration of few countries such as the US, Germany, Japan, and the UK. In a logical next step, research will be extended to international comparisons of a wider range of corporate governance systems. This study contributes to this research effort by providing information on Austria's corporate governance system.

Until now the structure of Austrian corporate governance has remained largely unexplored. This is partly due to the complex structure of the system and partly due to the difficulty in obtaining data. This paper therefore represents a first step towards a systematic analysis of corporate governance in Austria. The focus of this study is on the separation of ownership and control of Austrian firms.

The legal part contains basic information on the Austrian legal framework which determines the relationship between ownership and control. After a presentation of relevant regulation concerning the most important corporate legal forms, we summarize the basic features of legal forms characterized by the lack of a clearly defined residual owner. These „ownerless“ legal forms are very important in the Austrian financial sector.

In the empirical part, we present data concerning the Austrian corporate landscape. Moreover, we discuss which information about control structures has to be publicly disclosed via the company register and under the Austrian implementation of the EU-transparency directive. Thereafter, we present our empirical investigations. Based on information about the 600 largest Austrian firms, the following findings are particularly relevant in this context:

First, Austria seems to be the European country with the highest direct ownership concentration. The average fractional ownership of the largest shareholder in our sample of the 600 largest firms is over 80%!

Second, the state and the banking-sector play a disproportionately large role in corporate governance. Especially for the larger firms in our sample, the government and banks are major shareholders. For the largest size decile, the government and banks jointly own more than 30% of the stock! By contrast to e.g. Germany, these institutions rather than families are major players in the corporate governance of large firms.

Third, the banking and insurance industry is dominated by entities different from stock corporations (i.e. cooperatives, savings banks and mutual insurance associations). In order to grant these entities access to the capital market they have been allowed by law to found stock corporations, to transfer assets between those corporations and to mix the different legal forms. The result is a very complex system of corporate governance of financial institutions. In particular, a significant fraction of banks and insurance companies are organized as associations and are therefore effectively ownerless. Many of these associations are dominated by municipalities. The generally close relationship between political institutions and these associations provides the government with even more influence on the corporate sector.

Fourth, corporate ownership of Austrian companies is significant. Such inter-corporate equityholdings typically take the simple form of pyramids. By contrast to other EU countries (Belgium, Germany), there are virtually no cross-holdings in our sample of the 600 largest Austrian firms. The large ownership stake of foreign firms can be partly explained by the important role that German parent companies play in Austrian corporate governance. It is evident that foreign firms prefer direct investment in non-listed firms as they own a much smaller fraction of firms listed on the stock exchange.

Fifth, we find that the size of the supervisory board is determined by (i) the legal form, (ii) firm-size as well as (iii) the identity of the largest shareholder. In particular, we find that the size of the supervisory board is significantly positively related to state- and bank- control of a corporation even after controlling for firm-size and legal form.

Some of these features of Austrian corporate governance can be explained historically. In particular, after the second World War, a significant portion of the Austrian economy was nationalized, partly in order to withdraw their assets from the claims of the victorious nations. For several reasons this fact still influences today's corporate governance structures, despite numerous privatisations. First, some segments of the economy such as a significant part of the banking industry have in effect not yet been privatized. Second, partly because the nationalized part of Austria's economy was not represented on the stock market, the Vienna Stock Exchange remained small and illiquid. This fact was reinforced by the Austrian pension system, which almost exclusively relies on intergenerational transfer payments. Under Austrian law, pension funds exist only as of 1990 and institutional investment by pension funds is still of minor importance.

One possible interpretation of Austrian corporate governance is that of an "insider system" where changes in corporate strategy are triggered by "committees" rather than the outcome of bidding on a "market for corporate strategy". Franks and Mayer (1996)⁴ define an "insider system" of corporate governance to be characterized by (i) few listed companies, (ii) a large number of substantial share stakes and (iii) large intercorporate equityholdings. The Austrian situation is characterized by all of these features.⁵ In the light of these findings, it comes as no surprise that there does not exist a market for corporate strategy comparable to Anglo-American takeover-markets.⁶ Instead, the design of the corporate strategy resides with a firm's boards.

This report is structured as follows. Part one summarizes the relevant regulation. Part two contains information on data sources concerning the Austrian corporate landscape and summarizes our empirical findings.

⁴ Franks and Mayer, 1996, „Ownership, Control and the Performance of German Corporations“, LBS Working Paper.

⁵ Looking at a sample of 62 out of a total of only 74 nonfinancial companies listed on the Vienna Stock Exchange, we find that even for these companies, the largest shareholder owns on average more than 50% of the common stock. Moreover, there frequently exist minority shareholders such as banks holding significant stakes of the equity. Also, as discussed above, our findings illustrate the omnipresence of pyramiding albeit pyramids are usually less complex and smaller than in the case of Germany.

⁶ There also exist legal impediments to control-changes: The acquirer of a majority stake in a corporation is not automatically entitled to direct the company. This is the case since the management board of a corporation can only be resolved prematurely by the supervisory board conditional on a substantial cause. The premature removal of a member of the supervisory board requires a resolution of the general meeting of shareholders with a majority of at least three-fourths of the votes cast.

2. Legal Survey

As in most other jurisdictions Austrian corporate law distinguishes between (business in) legal forms involving personal liability of the entrepreneur and forms in which a corporate entity serves as a „shelter“ to avoid shareholders‘ personal liability for the obligations of the company⁷. (Basically Austrian law recognizes sole proprietorships and personal trading companies on the one hand and corporations on the other.) Appendix A contains a list of all corporate and non-corporate legal forms.

The most important corporate legal forms are the „company with limited liability“ (Gesellschaft mit beschränkter Haftung or short GmbH) and the „stock corporation“ (Aktiengesellschaft or short AG). Subsection 2.1 presents the major characteristics of these two legal forms. Moreover, this Subsection summarizes important legal provisions which may induce a divergence between ownership and control for the stock corporation. In particular, we discuss institutional determinants of voting in stock corporations such as voting-pacts or depository voting which may result in a deviation from the principle of „one share-one vote“. In this context, we also present legal provisions relevant for intercorporate equityholdings and, hence, deviations from „one share-one vote“ by chaining (ownership stakes in) several corporations.

Subsection 2.2 presents some legal forms characterized by the lack of a clearly defined residual owner. An important „ownerless“ corporate legal form in the banking industry is the „commercial cooperative“ (Erwerbs- und Wirtschaftsgenossenschaft). Other important ownerless legal forms in the financial sector are the „savings bank“ (Sparkasse) and the „mutual insurance association“ (Versicherungsverein auf Gegenseitigkeit).

⁷ Look generally Horvath in Heller/Löber/Bahn/Huber/Horvath, Austrian Business Law (1984) 123-228; N Simon, Introduction to Austrian Company Law, in Gröhs/Pollak, Austrian Law & International Business - Company Law and Accounting in Austria (1995); Kastner/Doralt/Nowotny, Gesellschaftsrecht, 5. edition, (1990); Maitland-Walker, Guide to European Company Laws (1993) 1-66.

2.1 The Company with Limited Liability and the Stock Corporation

2.1.1 Basic Structure

Stock corporations are subject to much tighter mandatory regulation than companies with limited liability. Both types of legal entities come into existence upon entry into the company register. Subsection 3.1.1 in the empirical part of this survey lists the data which the company register must provide.

The more standardized character of the stock corporation is reflected by the ease with which shares of stock can be transferred. Table 1 compares the company with limited liability with the stock corporation.

Table 1: Company with Limited Liability, Stock Corporation

Legal Form	Min. Capital (in ATS)	Mandatory Reserves	Superv.Board, Auditors	Transfer of Shares	Owners listed in company- register
Comp. w. Ltd. Liability	500.000	None	Voluntary for small firms	notarial deed	Yes
Stock Corporation	1.000.000	5% of annual profits; up to a maximum of 10% of share capital.	Mandatory	Free (or as specified in bylaws)	No

Organizationally, the supreme organ of both a stock corporation and a company with limited liability is the general meeting. The most striking difference between the organizational form of a stock corporation and a company with limited liability is the position of the managing directors: Whereas the managing director of a stock corporation is quite independent, the managing director of a company with limited liability has to obey instructions of the shareholders. While a managing director of a stock corporation can be revoked prematurely only with substantial cause, a managing director of a company with limited liability can be revoked at any time.

These differences are reflected by the provisions concerning the establishment of a supervisory board in order to monitor the management board. A supervisory board is mandatory in case of a stock corporation. By contrast, in a company with limited liability a

supervisory board is only required when the company is quite large (the amount of share capital is at least 1 Mio ATS and the number of shareholders exceeds 50 or the number of employees is more than 300). In case a limited liability company controls a group or runs an investment fund, it also has to maintain a mandatory supervisory board. Similar provisions determine whether a company with limited liability has to appoint auditors.

To summarize, the stock corporation is characterized by a mutually dependent system of checks and balances comprising the management board, the supervisory board and the general meeting of shareholders. While the supervisory board of a stock corporation is the principal link between the general meeting of shareholders and the management board, the owners of a company with limited liability are in much closer contact with the management. The following Subsection summarizes important legal provisions concerning the structure of the supervisory board of a stock corporation and large companies with limited liability.

2.1.1 The Supervisory Board

The main tasks of the supervisory board are (i) the appointment and – given substantial cause - the premature removal of the complete management board or single members; (ii) the supervision of the management of the company and the group; (iii) the approval of important decisions of the management. The supervisory board must hold quarterly meetings. The managing directors are obliged to submit reports to the supervisory board both on a regular basis and in case of important events. The supervisory board may at any time demand reports from the managing directors and may inspect the books and documents of the company

The supervisory board of both the stock corporation and the company with limited liability consists of at least three members. The maximum number of board members increases in proportional relation to the corporations' share capital. One third of the members of the supervisory board are appointed by the council of shop stewards which represents the employees of the company.⁸ The chairman of the supervisory board is always elected by the shareholders and holds a casting vote.

In general, all the members of the supervisory board have the same rights and duties. They have to act with the care of orderly businessmen. While no special know-how is required.

⁸ For large corporations, workers' representation on the supervisory board is fractionally smaller relative to Germany where workers' representation makes up for one half of the board.

the knowledge base of the supervisory board as a whole must enable the board to perform its task of supervising the managing directors.

No person may be a member of more than 10 supervisory boards. Thereby, board membership in representation of affiliated companies or banks is counted as one seat irrespective of the number of seats actually held by a single person. In spite of this extension, a single person may not occupy more than 20 seats on supervisory boards either in stock corporations or companies with limited liability. No person may chair more than five supervisory boards.

Once elected, the premature removal of a member of the supervisory board requires a resolution of the general meeting of shareholders agreed upon with a majority of at least three-fourth of the votes cast.

The next Subsection summarizes legal provisions relevant for voting in the general meeting of a stock corporation.

2.1.2 Voting in Stock Corporations

According to the Austrian Stock Corporation Act, every shareholder is entitled to attend the general meeting irrespective of the type of his shares. In general, one share has one vote. By contrast to German law, it is strictly forbidden under Austrian law to introduce multiple voting rights. However, a maximum number of votes per stockholder can be specified in the articles of association.

Up to one half the overall nominal amount of ordinary shares (i.e. one-third of the overall capital), it is possible to issue non-voting preference shares. Non-voting preference shares have to be provided with dividend preferences to be paid to the respective shareholders upon the distribution of the profits or the surplus realized upon liquidation of the corporation. If the holders of preference shares do not receive the annual payments they are entitled to for two subsequent years, non voting preference shares assume a right to vote until the claims of the holders of preference shares are met.

Voting by Depository Banks and Investment Funds

In practice, many minority shareholders do not attend the shareholders' meeting and vote personally but are represented by depository banks. These banks have to be authorized specifically in writing by the shareholder in order to exercise their depository votes. The authorization can be revoked at any time and expires after a maximum period of 15 months.

The depository bank is not obliged to reveal the name of the holder of the share in the general meeting. As there are few corporations with a wide-spread ownership-structure there do not exist strict legal provisions concerning the voting rights of depository banks.

Whereas in Germany banks have to communicate any relevant information (including motions) concerning the shareholder meeting to the shareholders and have to ask for voting instructions there do not exist similar specific legal provisions in Austria

Voting Pacts

Voting pacts are a common instrument used by shareholders to establish a common voting policy in the shareholder meeting. There are no special rules dealing with voting agreements. In general, if a shareholder breaks a voting pact this infringement does not render void the resolution of the shareholders' meeting.

To the degree that voting pacts give control to a party which does not hold a correspondingly high ownership stake in a corporation, such agreements deviate from the principle of one share-one vote. The separation of ownership and control can also be increased by „pyramiding“, i.e. chaining ownership stakes in several companies. The remainder of the Section summarizes the regulation concerning intercorporate equityholdings.

2.1.3 Intercorporate Equityholdings

In Austria a company, its subsidiaries and the trustees either of the company itself or a subsidiary are restricted from buying and holding its own shares. There are only few exceptions to this restriction and Austrian law enumerates these cases in which the acquisition of a company's own shares is allowed.

In case a company, its subsidiary⁹, or its trustee hold shares of the company in question, no votes may be cast on the basis of these shareholdings – irrespective of whether these shares are held in violation of the law or not. If a company issues new shares, any subsidiary and trustee of this company may not subscribe to these shares.

⁹ In terms of this regulation, a subsidiary is an undertaking which is controlled by the parent company. Thereby, the control concept comprises not only the existence of a unified management for both companies, but - much broader - also any other legally manifested right to exert significant influence.

In any case, the total amount of shares held by a company itself, its subsidiaries and their trustees must not exceed ten percent of the capital of the company in question. In case this threshold is exceeded, the company is obliged to sell the shares or even to withdraw them.

There are no explicit regulations governing cross or ring shareholdings. However, the above-mentioned provisions dealing with the acquisition of own shares are interpreted to apply also to indirect shareholdings.

2.2. Legal Forms without clearly defined Residual Owner

Whereas the above mentioned legal forms have owners, the following legal forms are examples of legal entities without a clearly defined residual owner. Whenever these „ownerless“ legal entities hold a controlling stake in a stock corporation, the resulting hybrid legal form is potentially characterized by an especially large divergence of ownership and control. As documented below, such hybrid legal forms constitute a large portion of the Austrian financial sector. Hence, the separation of ownership and control is of great practical importance in Austria. This is even more so given the substantial equityholdings of financial institutions in large Austrian non-financial companies documented in the empirical part of this survey.

2.2.1. The Commercial Cooperative

The main difference between corporations and cooperatives is in their different purposes: Whereas corporations aim for profit, the purpose of the cooperative lies in the promotion of its members. The following table 2 compares the commercial cooperative to the stock corporation.

Table 2: Commercial Cooperative vs. Stock Corporation

Legal Form	Purpose	General Meeting	Voting	Transfer of Shares
Commercial Cooperative	Promotion of members	May be replaced by Meeting of Representatives	One Vote per member	If provided for by bylaws: Subject to approval by management
Stock Corporation	Shareholder profit maximization	Mandatory	One Vote per share of common stock	Free (if not otherwise provided for by bylaws)

Both a stock corporation as well as a commercial cooperative have to appoint a supervisory board. However, whereas the members of the supervisory board of a stock corporation are elected by the general meeting, a commercial cooperative is not obliged to regularly call a general meeting of its members. The possibility to establish a meeting of representatives instead of a meeting of members of the cooperative implies the opportunity to exclude members from the direct control of the board members. In any case, the ability of the members of a commercial cooperative to control the management is limited by the voting structure of a cooperative. Each member of a commercial cooperative is only entitled to cast one vote – irrespective of the number of membership stakes held. Moreover, the transfer of membership stakes between members may be subject to approval by the management. As a consequence, the voting structure of commercial cooperatives is usually characterized by a uniform distribution of voting rights across its members.

2.2.2 The Private Foundation

A potentially even larger separation of ownership and control may prevail under the legal form of a private foundation. The private foundation was established in Austria in 1993. Such a foundation must execute and fulfill the purpose specified by the founder. This purpose may be private or public, charitable or not. It should be stressed, however, that a foundation may not trade or run a business itself but only hold shares and other assets. The private foundation has two mandatory organs, the managing board and the auditors. The Board must consist of at least three members. The Managing Board is the most important body as it manages and represents the foundation. The beneficiaries or any person with an economic interest in the sound operation of the foundation are neither entitled to be member of the managing board nor to nominate its members. In case a

supervisory board exists, only half of its members may be beneficiaries or have an economic interest in the operation of the private foundation.¹⁰

2.2.3. The Savings Bank

Saving banks are corporate entities which are founded either by municipalities (Gemeindeparkasse) or by savings bank associations (Vereinssparkasse). It should be noted that savings banks have no owner but instead there is a special relationship between the saving bank and either the municipality or the savings bank association in that these founders guarantee for the savings bank. While upon foundation, the founders of a savings bank have to provide sufficient capital, the capital subsequently belongs to the savings bank and will not be paid back to the founder.

Savings banks have two organs: the board of directors (Vorstand) and the savings-bank-council (Sparkassenrat) which can be compared to the supervisory board.

Since savings banks do not have owners, they cannot raise capital by issuing shares. In order to mitigate this problem, a special hybrid legal form was created, the so-called savings-bank-stock corporation (Sparkassen-Aktiengesellschaft). A savings-bank-stock corporation is a savings-bank which owns equity in a stock-corporation. The legal construction therefore comprises institutions at three levels: (i) the municipality or savings bank association which controls (ii) the saving bank which in turn holds equity of (iii) the savings-bank-stock corporation.

An example of such a hybrid legal form is the largest Austrian bank, Bank Austria, which recently acquired control over Creditanstalt. Bank Austria itself emerged from a merger involving a savings bank founded by the municipality of Vienna such that the city of Vienna guarantees Bank Austria's liabilities in case of default. However, triggered by the recent acquisition of Creditanstalt by Bank-Austria, a law is underway which amends the rules about the relationship among the different legal entities within this area – in particular concerning the guarantee-relationship between savings banks and municipalities.

2.2.4 The Mutual Insurance Association

¹⁰ The number of private foundations has increased dramatically over the last year. While there were only 365 of these legal entities at the beginning of April 1996, there now exist more than 600 private foundations. For more detailed information on private foundations, see Breindl, A. G., *Typologie der Privatstiftung: Eine empirische Analyse der ersten 365 Stiftungsurkunden*, Service Fachverlag, Wien 1997.

In Austria only stock corporations and mutual insurance associations are allowed to run an insurance business upon permission by the competent authority. A mutual insurance association is an economic association which provides insurance to its members. A member of an insurance association at the same time contracts insurance by this association. However, mutual insurance associations can offer insurance to non-members as well. Large mutual insurance associations have to maintain three organs: the board of directors, the supervisory board and a supreme organ which is either the meeting of members or the meeting of representatives. Similar to a commercial cooperative, it is possible to exclude the members of a mutual insurance association from control whenever the articles of association specify that a meeting of representatives replaces the meeting of members.

Similar to savings banks, mutual insurance associations cannot issue shares. To allow mutual insurance associations to access the capital market, a special type of restructuring for insurance associations was allowed in 1991. According to section 61a of the Insurance Supervision Act, mutual insurance associations are permitted to contribute their business partly or wholly to a stock corporation which is founded only for this purpose. In this case, only the mutual insurance association itself receives stock, but no stock is distributed to the members of the association.

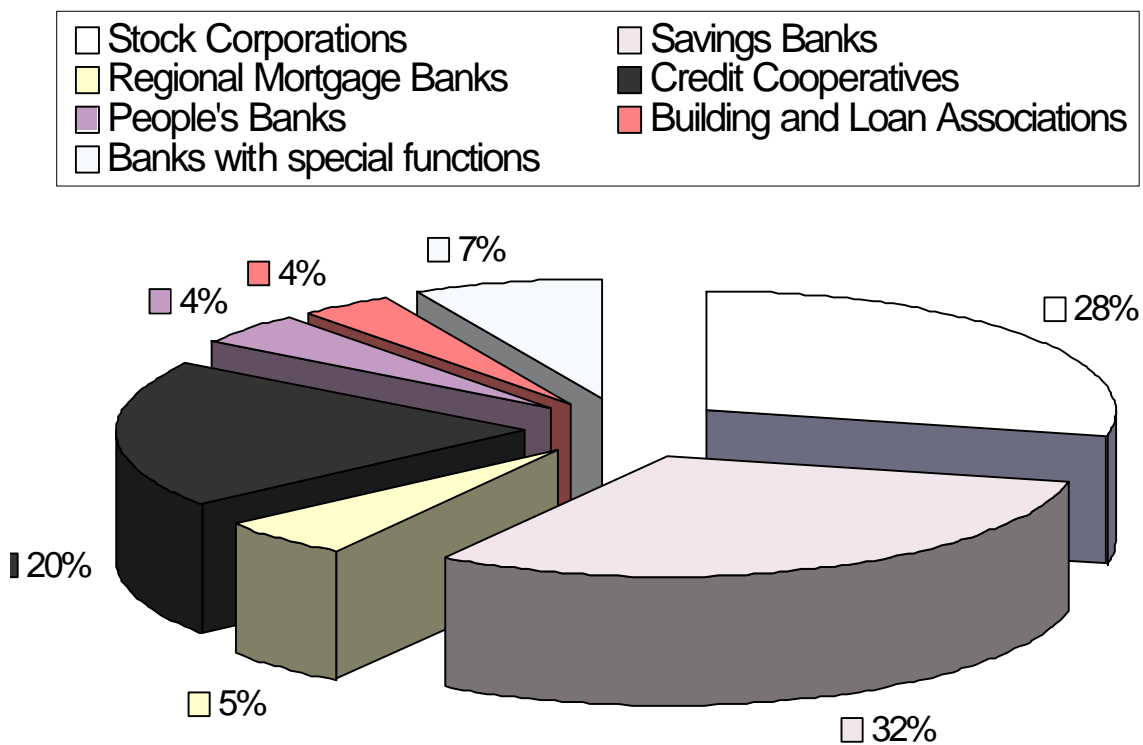
Mutual insurance associations also hold significant stakes in other Austrian companies. As an example, a mutual insurance association, Wiener Städtische Versicherung, holds a 9% stake of the equity of Bank Austria. Similar to the savings bank council of Bank Austria, this mutual insurance association is presided by the mayor of Vienna.

2.2.5 The Prevalence of „Ownerless“ Legal Forms in the Banking Industry

Figure 1 shows the relative importance of the various legal forms in the credit sector in Austria as measured by total assets in 1995. This figure depicts the situation before Bank Austria acquired control over Creditanstalt. The most important legal forms are savings banks (Sparkassensektor) with a "market share" of 32%, and Credit cooperatives (mainly the Raiffeisensektor, 20% of total assets). Problems associated with the separation of ownership and control should be expected here because ownership structures are typically not well defined. Since Creditanstalt has been the largest bank organized as a stock corporation, 52% is likely to be a lower bound of the „ownerless“ segment of the credit sector. Complementary to market shares, in a 1989 study of the ownership structure in

Austria, Beer et al. (1989)¹¹ found that the state ultimately owned 24%, Savings Banks 17.4%, and Commercial Cooperatives 13.5% of the equity in the credit sector.

Figure 1: The Credit Sector in Austria
(Total Assets in Percent of Total in 1995)



¹¹ Beer, Elisabeth et al., 1991, "Wem gehört Österreichs Wirtschaft wirklich?", Studie der Kammer für Arbeiter und Angestellte für Wien, Orac Verlag.

3. Statistical Survey

This section summarizes our quantitative assessment of the Austrian corporate landscape based on data provided by the Austrian Statistical Office (ÖSTAT) and an Austrian publisher, the Wirtschafts-Trend Zeitschriftenverlagsgesellschaft m.b.H..

Subsection 3.1 summarizes regulation relevant for the disclosure of information about the control structure of Austrian corporations and presents some data sources on the Austrian corporate landscape.

3.1. Data on the Austrian Corporate Landscape

3.1.1 The Company Register

At the company register the following data on stock corporations are available on line: the business name; the registered office; the business area, the amount of share capital; the number of the shares, the members of the management board, how the company is represented and by whom; every resolution of the shareholders concerning an important matter.

At the court which is in charge of the geographical area into which a company's registered office falls, the following additional documents are publicly available: the Articles of association; information on the subscription of shares by the founders; the names of the members of the supervisory board; information on the foundation of the company; the minutes of the shareholder-meetings including the list of participants of each meeting; mandatory reports concerning mergers, successions, transformations of the business area; the annual financial statements.

In addition to the above mentioned documents, a company with limited liability has to submit a list of shareholders to the company register.

3.1.2 The Transparency Directive

Austria has implemented the transparency directive in 1990. The aim of the relevant provisions in the Stock Exchange Act is to enhance the transparency of control structures of Austrian stock corporations: Large acquisitions or sales of control over voting-rights trigger the duty to announce that a major change in the control structure of

a listed stock corporation has occurred. In particular, Section 91 of the Stock Exchange Act specifies „notification thresholds“, i.e. certain critical values for the portion of voting rights controlled by a single party. Anybody crossing a notification threshold due to a direct or indirect acquisition¹² or sale of control over voting rights has to announce which notification threshold has been crossed. In particular, the thresholds specified by the law are 5%, 10%, 25%, 50%, 75% and 90% of the total voting rights of the company.¹³

The disclosure requirement comprises neither the exact portion of voting rights controlled nor information on the way and the “channel“ through which these voting rights are controlled. However, in practice it is not unusual that such information is disclosed voluntarily.¹⁴ Note also that under the Stock Exchange Act the managers of a corporation are generally not obliged to disclose their own holdings of shares unless a threshold is crossed.

According to the Act on the Supervision of Investment Services, the crossing of a notification threshold must be announced to the Bundeswertpapier-Aufsicht as well as the corporation in question within 7 days. According to Section 93 of the Stock Exchange Act the corporation in question is obliged to inform the general public via an announcement in the official newspaper within additional 9 days. If a corporation learns that its control structure is materially altered (relative to what is publicly known) without proper prior notification the corporation has to instantaneously inform the general public. Besides announcement in the official newspaper, it is also possible to communicate the occurrence of a control change in real time via the information system of the Vienna Stock Exchange, HERMES.

¹² Section 92 of the Stock Exchange Act lists situations in which indirect control of voting rights is deemed equivalent to direct control of voting rights. The most important are (i) voting rights held by other persons or entities in their own name but on behalf of the person or entity in question; (ii) voting rights held by an undertaking controlled by the person or entity in question; (iii) voting rights held by a third party with whom the person or entity in question has concluded a long-term written agreement which obliges the third party to adopt a certain voting policy; (iv) voting rights held by a third party when there exists a written agreement between this party and the person or entity in question which temporarily transfers control over these voting rights for consideration, (v) voting rights attached to shares deposited with a person or entity which the person or entity in question can exercise at its discretion in the absence of specific instructions from the holders.

¹³ Hence, relative to the transparency directive, there are two additional thresholds, 5% and 90%, which are important due to the fact that certain minority rights and majority rights are linked to these thresholds.

¹⁴ As an example, consider Allgemeine Baugesellschaft A. Porr AG. In this corporation, there exists a voting pact controlling more than 75% of the votes which comprises Bank Austria, Bundesländer Versicherung, RZB, GTM Entrpose, BeTePe Bau AG, Wiener Städtische Allg. Versicherung and Wiener Holding.

Although the law does not specify effective sanctions in case of non-compliance with the provisions of the Stock Exchange Act, it seems that control changes are regularly disclosed in practice.¹⁵ Based on these disclosures, the Vienna Stock Exchange provides a summary of the current voting structure of listed corporations on request. There also exist plans to make this information available on the Internet.¹⁶

3.1.4 Data

Data about basic population statistics was provided by the Austrian Statistical Office and is census data as of 1991. The data provided by the *Wirtschafts-Trend-Zeitschriftenverlagsgesellschaft m.b.H*¹⁷ is based on information collected by a credit-rating agency, the *Österreichischer Kreditschutzverband von 1870*, as well as information supplied by the corporations themselves. Our sample includes the largest 600 Austrian non-financial corporations as measured by turnover. Ownership data, pyramids, data about management and supervisory boards, and key accounting data are available for the year 1996. About 25 % of the Austrian workforce were employed by a corporation in our sample. The aggregate turnover of these corporations accounts for about 30% of GDP. Furthermore, a subsample of 62 listed non-financial companies covering 80% of total listed non-financial corporations is constructed.

3.2. Basic Population Statistics

Table 3 gives a breakdown of the total number of active companies by legal form in 1991. The most important legal form in terms of number of companies is the sole-proprietorship (EU) of which 166,420 existed in 1991 representing 73.8% of the total number of companies in Austria (225,367). Economically (in terms of employees) the most important legal form is the company with limited liability (GmbH) of which 37,491 (16.6% of the total) existed in the reporting year employing 868,904 people or 36.3% of the work force (excluding civil servants). In general, the largest companies adopt the stock corporation (AG) as the legal form. Only 733 AGs (0.33%) employ nearly 12% of the employees.

¹⁵ The Vienna Stock Exchange built up the reputation to enforce the disclosure of control changes when the Julius Meinel AG was delisted as a consequence of non-compliance with the disclosure requirements.

¹⁶ We would like to thank Dr. Heider from the Vienna Stock Exchange for helpful discussions. The http address under which the HERMES information system can be accessed is <http://www.vienna-stock-exchange.at>.

¹⁷ The name of the CD-Rom is: trend TOP 500 CD-ROM.

Tables 4.a) and 4.b) provide information on the total number and percentages, respectively, of companies broken down by sector of activity and legal form. The sector of activity is defined by the Austrian Statistical Office according to the öNACE classification scheme. Slight inconsistencies between table 3 and tables 4 and 5 concerning the total number of companies arise due to ÖSTAT estimation procedures.

Most Austrian companies operate in the retail sector (more than 68,000 or 30.1%), followed by tourism (17.9%), and manufacturing (nearly 30,000 or 13.2%). More than one third of the GmbHs are located in the retail sector. AGs operate disproportionately often in the manufacturing (23.4% of AGs), the credit and insurance (20.7%), the real estate (17.5%), and the retail sector (17.2%). Interesting is the cluster of Commercial Cooperatives (Gen) in the credit sector (nearly 60%) mainly due to the presence of the Raiffeisen cooperatives. We compute the standardized residuals of the Frequency Table 4.a) relative to fitted values when legal form and sector are independent categorical variables. The Pearson Chi-squared test with 40 degrees of freedom rejects the null hypothesis of independence of legal-form and sector at a p-value below 0.001.¹⁸

Tables 5.a) and 5.b) display the distribution of the number, respectively, percentages of companies by employee size classes and legal forms. Obviously, the distribution of the number of sole-proprietorships over size-classes is skewed towards the smaller size categories. The largest part of these companies consist only of the owner-entrepreneur and do not at all employ other people. Sole proprietorships with fewer than 19 employees remain the single most important legal form. The size classes from 20 up to 999 employees are dominated by GmbHs, but more than 95% of the GmbHs employ less than 100 people. This strongly reflects the small and medium sized corporate structure in Austria. While AGs are (as expected) most prominent in the largest size class (1000 -), holding companies, which do not have many employees, are responsible for the nearly uniform distribution of AGs across size classes.

¹⁸ We regrouped categories in order to obtain fitted values in excess of one under the assumption of independence. The test does not adjust for company size.

Table 3: Total Number of Active Companies by Legal Form in 1991

Legal Form	Companies		Employees	
	Number	Percent of Total	Number	Percent of Total
Stock Corporation (AG)	733	0.33	282,578	11.79
Company with Limited Liability (GmbH)	37,491	16.64	868,904	36.25
Limited Partnership with a Company with Limited Liability (GmbH & CoKG)	5,649	2.51	168,855	7.04
Limited Partnership (KG)	4,358	1.93	96,440	0.40
General Partnership (OHG)	2,212	0.98	44,805	1.87
Small Registered Limited Partnership (KEG)	64	0.03	193	0.01
Small Registered Partnership (OEG)	137	0.06	492	0.02
Civil Law Partnership (GesbR)	4,779	2.12	29,366	1.23
Sole Proprietorship (EU)	166,420	73.84	641,417	26.76
Commercial Cooperative (Gen)	1,552	0.69	61,569	2.57
Other Legal Forms	1,972	0.88	202,238	8.44
TOTAL	225,367	100.0	2,396,857	100.0

Source: ÖSTAT (Austrian Statistical Office)

Table 4.a): Distribution of the Number of Companies by Sector and Legal Form

	GmbH	EU	AG	Other	GmbH&CoKG	Gen	OHG	GesbR	KG	OEG	KEG	TOTAL
Agriculture and Forestry	10.0	117.0	0.0	2.0	3.0	22.0	2.0	2.0	0.0	1.0	1.0	160.0
Fishery	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	2.0
Mining	92.0	188.0	5.0	0.0	36.0	0.0	6.0	9.0	18.0	0.0	0.0	354.0
Manufacturing	5915.0	20253.0	171.0	68.0	1397.0	179.0	448.0	558.0	950.0	10.0	6.0	29955.0
Utilities	60.0	102.0	29.0	97.0	8.0	32.0	3.0	9.0	17.0	0.0	0.0	357.0
Construction	4005.0	10173.0	21.0	32.0	817.0	4.0	157.0	190.0	323.0	5.0	2.0	15729.0
Retail Sector	13388.0	47936.0	126.0	82.0	1996.0	269.0	1015.0	1125.0	2052.0	29.0	15.0	68033.0
Tourism	4508.0	33168.0	18.0	356.0	390.0	12.0	295.0	1027.0	511.0	26.0	22.0	40333.0
Transport and Communications	2122.0	6722.0	77.0	141.0	423.0	16.0	68.0	94.0	113.0	3.0	0.0	9779.0
Banking and Insurance	292.0	1057.0	151.0	148.0	25.0	923.0	7.0	26.0	8.0	2.0	0.0	2639.0
Real Estate and Consulting	5728.0	19374.0	128.0	174.0	370.0	86.0	128.0	1147.0	272.0	42.0	13.0	27462.0
Education	56.0	784.0	0.0	117.0	2.0	3.0	1.0	47.0	0.0	1.0	1.0	1012.0
Health Care, Veterinary Services and Social Services	110.0	13444.0	0.0	270.0	18.0	1.0	5.0	154.0	3.0	6.0	0.0	14011.0
Other Services	1203.0	13104.0	5.0	485.0	163.0	5.0	77.0	392.0	90.0	12.0	4.0	15540.0
TOTAL	37489.0	166423.0	731.0	1972.0	5648.0	1552.0	2212.0	4781.0	4357.0	137.0	64.0	225366.0

Source: ÖSTAT (Austrian Statistical Office)

Table 4.b): Distribution of Percentages of Companies by Sector and Legal Form

SECTOR	GmbH	EU	AG	Other	GmbH &CoKG	Gen	OHG	GesbR	KG	OEG	KEG	TOTAL (Firms)
Agriculture and Forestry	0.03	0.07	0.00	0.10	0.05	1.42	0.09	0.04	0.00	0.73	1.56	0.07
Fishery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
Mining	0.25	0.11	0.68	0.00	0.64	0.00	0.27	0.19	0.41	0.00	0.00	0.16
Manufacturing	15.78	12.17	23.39	3.45	24.73	11.53	20.25	11.67	21.80	7.30	9.38	13.29
Utilities	0.16	0.06	3.97	4.92	0.14	2.06	0.14	0.19	0.39	0.00	0.00	0.16
Construction	10.68	6.11	2.87	1.62	14.47	0.26	7.10	3.97	7.41	3.65	3.13	6.98
Retail Sector	35.71	28.80	17.24	4.16	35.34	17.33	45.89	23.53	47.10	21.17	23.44	30.19
Tourism	12.02	19.93	2.46	18.05	6.91	0.77	13.34	21.48	11.73	18.98	34.38	17.90
Transport and Communications	5.66	4.04	10.53	7.15	7.49	1.03	3.07	1.97	2.59	2.19	0.00	4.34
Banking and Insurance	0.78	0.64	20.66	7.51	0.44	59.47	0.32	0.54	0.18	1.46	0.00	1.17
Real Estate and Consulting	15.28	11.64	17.51	8.82	6.55	5.54	5.79	23.99	6.24	30.66	20.31	12.19
Education	0.15	0.47	0.00	5.93	0.04	0.19	0.05	0.98	0.00	0.73	1.56	0.45
Health Care, Vertenary Services and Social Services	0.29	8.08	0.00	13.69	0.32	0.06	0.23	3.22	0.07	4.38	0.00	6.22
Other Services	3.21	7.87	0.68	24.59	2.89	0.32	3.48	8.20	2.07	8.76	6.25	6.90
TOTAL (All Sectors)	16.63	73.85	0.32	0.88	2.51	0.69	0.98	2.12	1.93	0.06	0.03	100.00

Source: ÖSTAT (Austrian Statistical Office)

Table 5.a): Distribution of Number of Companies by Employee Size Classes and Legal Form

Size Class (# of employees)	GmbH	EU	AG	Other	GmbH & CoKG	Gen	OHG	GesbR	KG	OEG	KEG	TOTAL
0.0	391.0	64870.0	14.0	484.0	311.0	6.0	274.0	1598.0	368.0	74.0	27.0	68049.0
1.0	4772.0	31703.0	50.0	346.0	252.0	91.0	197.0	643.0	308.0	20.0	13.0	38087.0
2-4	11840.0	42193.0	68.0	462.0	789.0	184.0	501.0	1191.0	875.0	31.0	18.0	57277.0
5-9	7972.0	18117.0	63.0	204.0	1056.0	307.0	523.0	769.0	1020.0	5.0	5.0	29021.0
10-19	5538.0	6992.0	65.0	180.0	1299.0	349.0	348.0	419.0	855.0	7.0	1.0	15198.0
20-49	3953.0	2140.0	73.0	138.0	1196.0	359.0	234.0	139.0	589.0	0.0	0.0	8232.0
50-99	1508.0	299.0	73.0	68.0	433.0	153.0	73.0	14.0	199.0	0.0	0.0	2621.0
100-199	843.0	82.0	67.0	48.0	196.0	73.0	38.0	7.0	82.0	0.0	0.0	1354.0
200-499	487.0	26.0	97.0	20.0	100.0	22.0	16.0	1.0	43.0	0.0	0.0	769.0
500-999	122.0	1.0	84.0	8.0	15.0	6.0	5.0	0.0	14.0	0.0	0.0	241.0
1000-	63.0	0.0	78.0	14.0	1.0	2.0	3.0	0.0	4.0	0.0	0.0	161.0
TOTAL	37489.0	166423.0	732.0	1972.0	5648.0	1552.0	2212.0	4781.0	4357.0	137.0	64.0	221010.0

Source: ÖSTAT (Austrian Statistical Office)

Table 5.b): Distribution of Percentages of Companies by Employee Size Classes and Legal Form

Size Class (# of employees)	GmbH	EU	AG	Other	GmbH & CoKG	Gen	OHG	GesbR	KG	OEG	KEG	TOTAL
0.0	1.04	38.98	1.91	24.54	5.51	0.39	12.39	33.42	8.45	54.01	42.19	30.79
1.0	12.73	19.05	6.83	17.55	4.46	5.86	8.91	13.45	7.07	14.60	20.31	17.23
2-4	31.58	25.35	9.29	23.43	13.97	11.86	22.65	24.91	20.08	22.63	28.13	25.92
5-9	21.26	10.89	8.61	10.34	18.70	19.78	23.64	16.08	23.41	3.65	7.81	13.13
10-19	14.77	4.20	8.88	9.13	23.00	22.49	15.73	8.76	19.62	5.11	1.56	6.88
20-49	10.54	1.29	9.97	7.00	21.18	23.13	10.58	2.91	13.52	0.00	0.00	3.72
50-99	4.02	0.18	9.97	3.45	7.67	9.86	3.30	0.29	4.57	0.00	0.00	1.19
100-199	2.25	0.05	9.15	2.43	3.47	4.70	1.72	0.15	1.88	0.00	0.00	0.61
200-499	1.30	0.02	13.25	1.01	1.77	1.42	0.72	0.02	0.99	0.00	0.00	0.35
500-999	0.33	0.00	11.48	0.41	0.27	0.39	0.23	0.00	0.32	0.00	0.00	0.11
1000-	0.17	0.00	10.66	0.71	0.02	0.13	0.14	0.00	0.09	0.00	0.00	0.07

Source: ÖSTAT (Austrian Statistical Office)

3.3. Ownership Structure

The findings reported in this subsection are based on data on the 600 largest listed and non-listed non-financial Austrian corporations as measured by total sales.

3.3.1. The Ownership-Structure of the 600 largest Austrian Companies

Among the 600 largest Austrian firms, there are 242 (40.3%) stock corporations (AGs), 301 (50.2%) companies with limited liability (GmbHs), 25 GmbH&CoKGs, 24 personal liability companies (mainly KGs and OHGs), and 8 cooperatives (Gen). The data provided by the TREND-Verlag is as of 1996. We split the sample in 8 size-classes where firm size is measured by sales.

As can be seen from table 6 and figure 2, (direct) ownership concentration is very high and prevalent in all size classes in Austria: Even in the largest 5% of the companies the largest shareholder holds 67% of the equity on average. This percentage rises (though not monotonically) as companies become smaller, and the average largest stake in the 600 largest Austrian corporations is 82.2%! In 297 companies, the largest stake is 100%, only 97 have more than 3 owners! By international standards, Austria seems to be the European country with the largest ownership concentration.

Tables 6.a), 6.b), and figure 3 show direct and ultimate (direct plus indirect) ownership broken down by investor categories (bank, domestic firm, foreign firm, state, family, and dispersed¹⁹ (public) ownership) and size class. Overall, the most important shareholders are domestic and foreign firms holding together nearly 64% of total equity directly. At first sight, banks and the state play only a minor role in influencing corporations by means of ownership. Families hold 22.6% of the stakes directly. Based on the Pearson Chi-squared statistic, we can reject the hypothesis of independence of firm-size and direct ownership of different investor-categories. The large direct ownership of domestic firms (33.6%) indicates the omnipresence of pyramiding. The average pyramid in the largest 600 firms in Austria comprises 3 layers.

Ultimate holdings change the picture: Families nearly double their control to 38.6% of the shares. Together, state and bank ultimate holdings equal 17.3% of total equity. Foreigners control Austrian firms mainly via direct ownership.

Figures 4 to 7 show direct and ultimate ownership broken down by investor categories and size classes. By contrast to the German situation, the importance of ultimate family

¹⁹ A dispersed ownership structure is one where no shareholder owns a stake in excess of 5%.

ownership of large firms is relatively smaller than the importance of the state's and banks' equityholdings. Together, state and banks' ultimate ownership equals 30% of the equity of the largest 5% of Austrian firms.²⁰ Strikingly, state and bank ownership is positively related to firm size, while family ownership is negatively related to firm-size. We do not find evidence of a relationship between ownership by foreign firms and firm size.

Table 6: Average Ownership by Company Size and Ownership Stake Size Class

Size Classes by Sales		Ownership Distribution			
Class	Number of Companies	Largest Stake	2nd Stake	3rd Stake	Rest
95 – 100%	30	67,0	10,6	2,9	19,5
90 – 95%	30	84,1	4,1	1,0	10,8
75 – 90%	91	80,1	10,7	2,4	6,8
50 – 75%	149	83,4	9,8	1,3	5,5
25 – 50%	149	83,5	9,3	1,4	5,7
10 – 25%	91	83,9	9,2	2,1	4,8
5 – 10%	30	86,9	8,1	2,0	3,0
0 – 5%	30	78,3	11,6	3,9	6,2
All	600	82,2	9,5	1,9	6,5

Data Basis: Trend-Verlag

²⁰ This finding is important in the light of the close relationships between Austrian governmental institutions and Austrian banks.

Table 7.a): Direct Ownership by Investors and Size Classes

Size Classes by Sales		Investor Categories					
Class	Number of firms	Banks	Domestic Firms	Foreign Firms	State	Family	Public
95 - 100%	30	3,4	29,6	31,6	13,4	7,2	14,8
90 - 95%	30	8,9	32,6	32,3	8,4	8,4	9,4
75 - 90%	91	3,5	44,2	27,5	6,0	16,0	3,0
50 - 75%	149	4,5	35,1	26,7	7,4	23,1	3,3
25 - 50%	149	4,8	30,3	35,8	2,3	22,2	4,7
10 -25%	91	2,8	29,8	29,0	1,8	32,9	3,7
5 - 10%	30	1,6	42,1	27,1	6,7	21,3	1,2
0 - 5%	30	0,3	20,0	33,6	3,3	41,6	1,2
All	600	4,0	33,6	30,3	5,2	22,6	4,3

Table 7.b): Direct plus Indirect Ownership by Investor and Size Class

Size Classes by Sales		Investor Categories					
Class	Number of firms	Banks	Domestic Firms	Foreign Firms	State	Family	Public
95 - 100%	30	6,5	0	35,3	26,8	7,4	21,5
90 - 95%	30	9,6	0	29,7	18,1	19,1	23,6
75 - 90%	91	7,8	0	34,2	13,7	34,2	10,0
50 - 75%	149	5,9	0	29,1	12,8	44,3	7,6
25 - 50%	149	5,9	0	39,0	8,8	35,8	10,4
10 -25%	91	3,5	0	35,0	4,7	48,3	7,4
5 - 10%	30	2,5	0	31,1	19,0	40,4	7,1
0 - 5%	30	0,3	0	34,6	6,7	57,2	1,2
All	600	5,6	0	33,9	11,7	38,6	9,8

Data Basis: Trend-Verlag

Figure 2: Average Ownership by Company Size Classes and Ownership Stakes

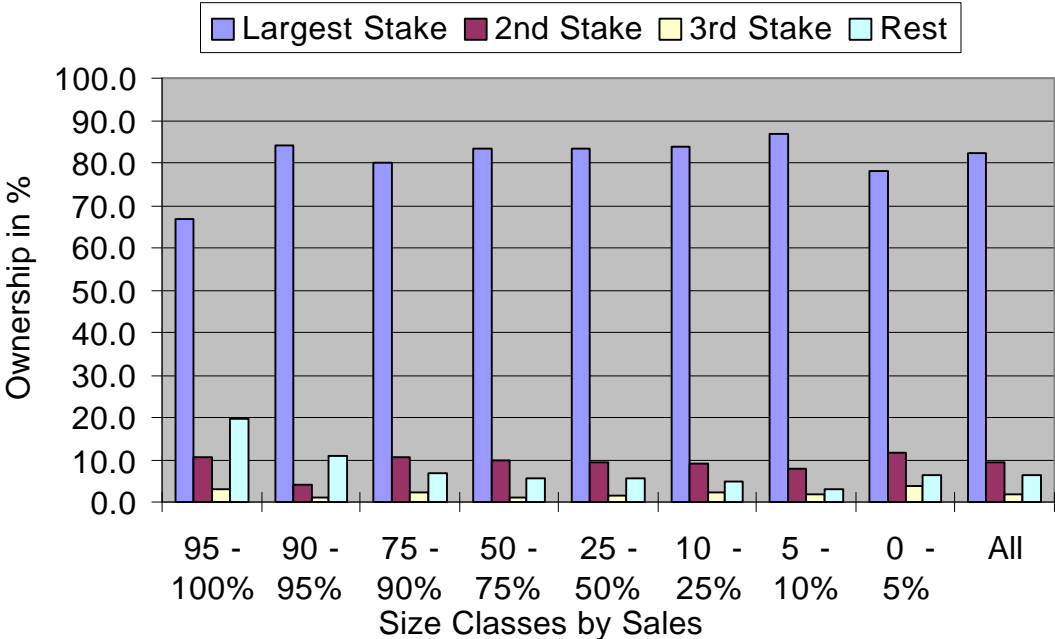


Figure 3: From Direct to Ultimate Ownership

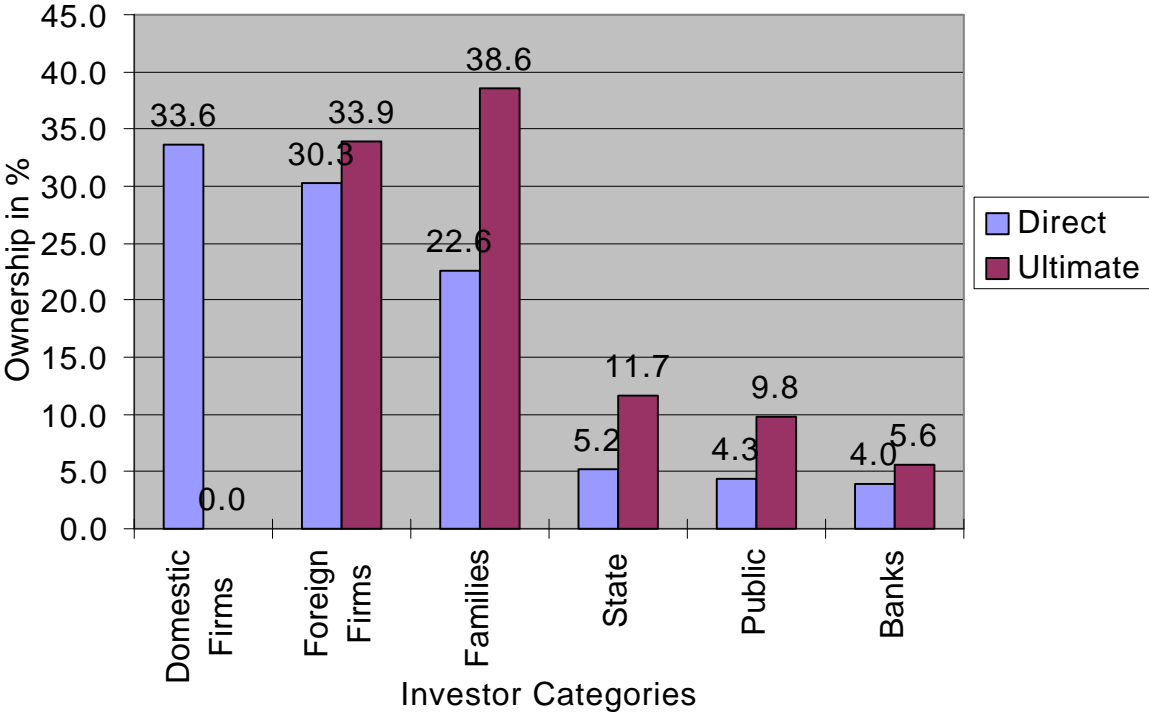


Figure 4: THE STATE

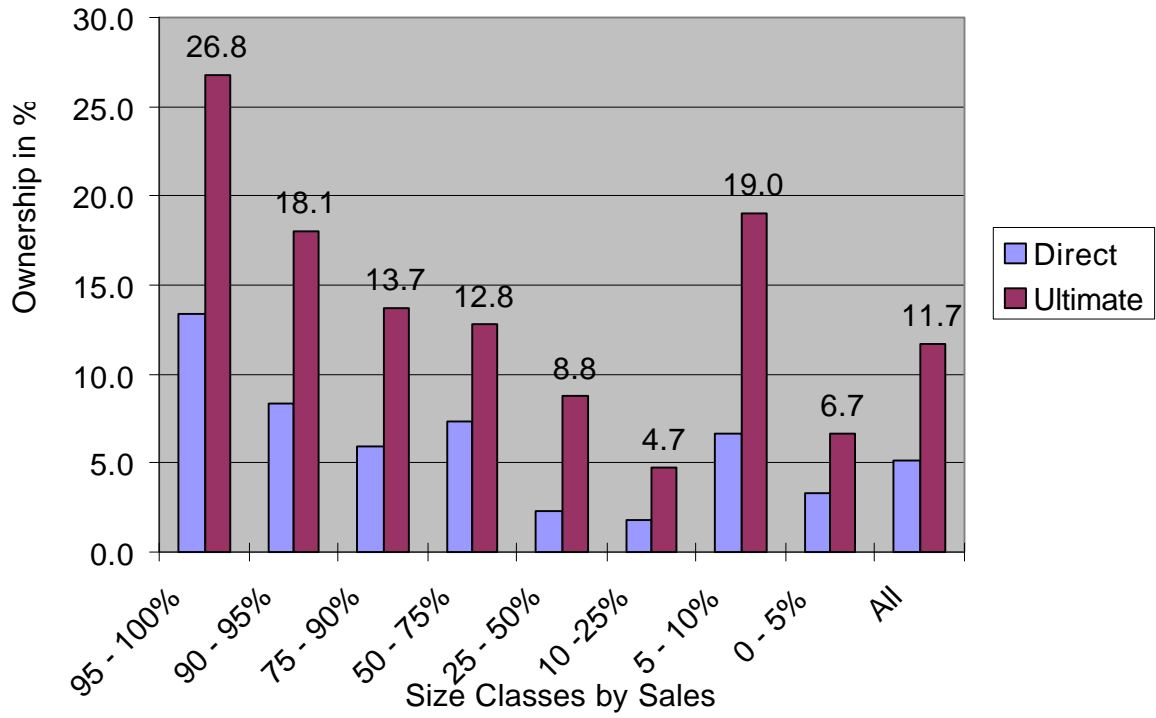


Figure 5: BANKS

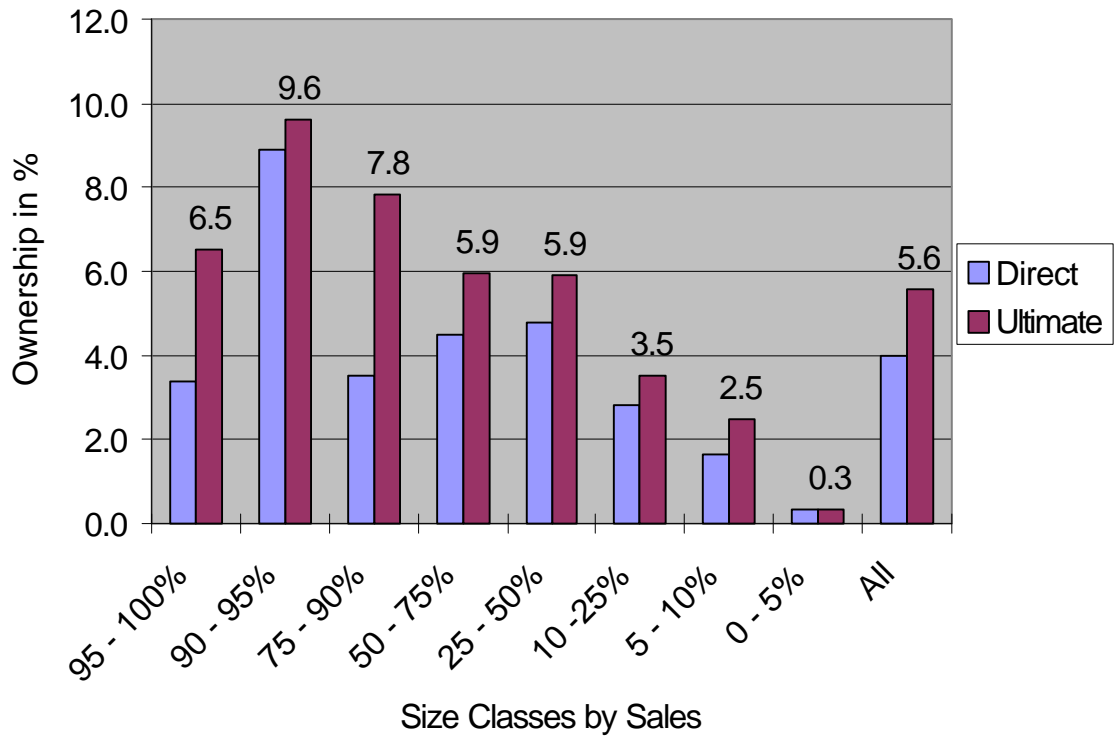


Figure 6: FAMILIES

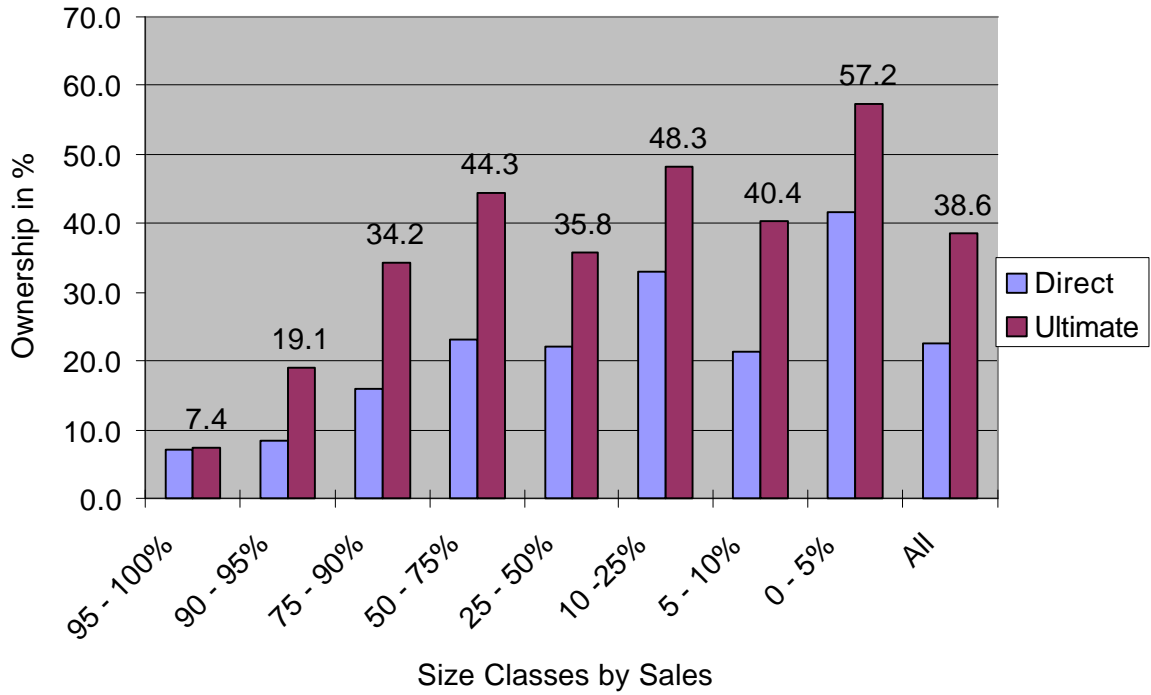
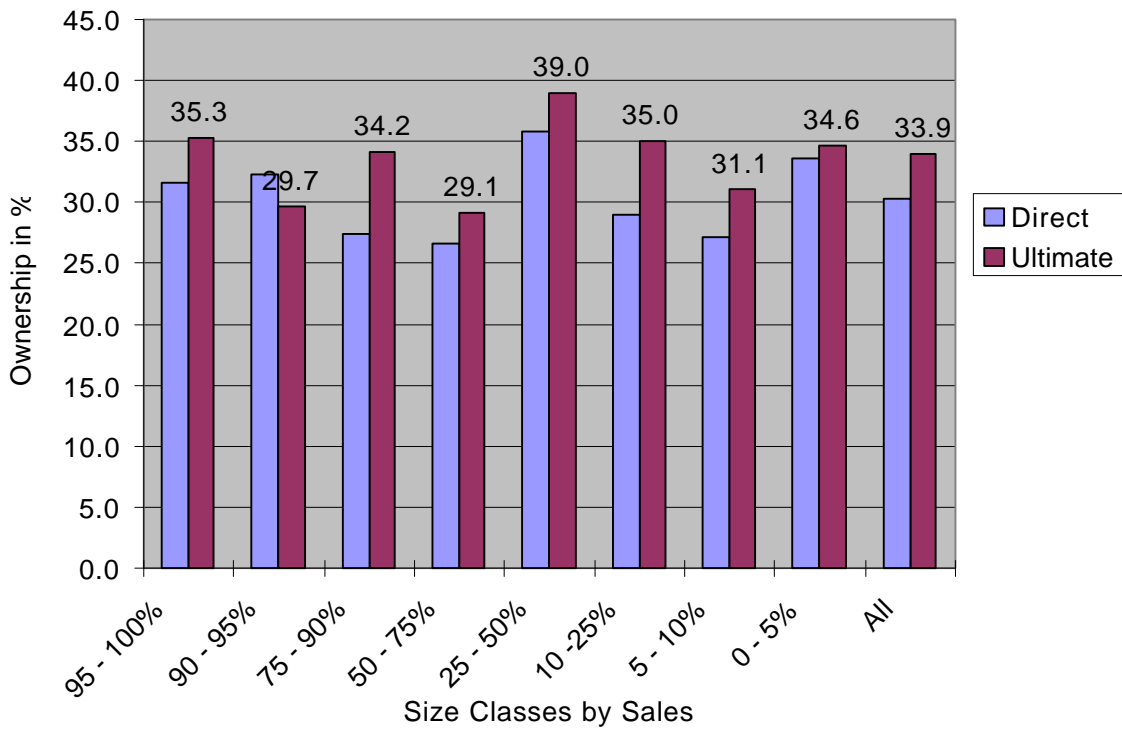


Figure 7: FOREIGN FIRMS



3.3.2. The Ownership Structure of Non-Financial Listed Firms

Despite the small sample of listed non-financial firms (62 companies) a comparison to the complete sample of the 600 largest corporations is interesting. Ownership concentration in listed firms remains very high (see table 8). On average, the largest shareholder holds 52.4% of the equity, only 2 (!) companies have a dispersed ownership structure²¹, in all other firms at least one large controlling shareholder remains.

The most striking features of tables 9.a) and 9.b) are the increased role of ownership by banks and the state in the larger size classes, and the minor importance of foreign firms in Austrian listed companies. While banks hold ultimately 5.6% of the shares in the 600 largest companies, they own 13.3% of the equity of listed Austrian firms. Again, state control is more prevalent in larger firms, family control in smaller.

Table 8: Stock Exchange:
Average Ownership by Company Size Classes and Ownership Stakes

Size Classes by Sales		Ownership Distribution			
Class	Number of Companies	Largest Stake	2nd Stake	3rd Stake	Rest
90 - 100%	7	48.9	7.0	0.7	43.4
75 - 90%	9	48.0	9.2	2.7	40.1
50 - 75%	15	59.6	15.5	3.1	21.8
25 - 50%	15	48.6	9.4	2.5	39.5
10 - 25%	9	50.5	11.8	5.9	31.8
0 - 10%	7	56.8	6.9	1.4	34.9
All	62	52.4	10.6	2.9	34.1

Data Basis: Trend-Verlag

²¹ We define a dispersed ownership structure to be one in which no shareholder owns a stake in excess of 5%.

Table 9.a): Stock Exchange:
Direct Ownership by Investors and Size Classes

Size Classes by Sales		Investor Categories					
Class	Number of firms	Banks	Domestic Firms	Foreign Firms	State	Family	Public
90 - 100%	7	1.4	36.0	4.1	7.3	7.7	43.5
75 - 90%	9	19.0	15.1	6.5	11.4	11.1	36.9
50 - 75%	15	16.7	31.1	24.9	3.5	2.3	21.5
25 - 50%	15	2.7	24.8	21.8	0.0	11.2	39.5
10 - 25%	9	15.3	23.4	19.8	0.0	10.8	30.7
0 - 10%	7	13.8	24.3	13.8	0.0	13.2	34.9
All	62	11.4	25.9	17.1	3.3	8.9	33.4

Table 9.b): Stock Exchange:
Direct plus Indirect Ownership by Investor and Size Class

Size Classes by Sales		Investor Categories					
Class	Number of firms	Banks	Domestic Firms	Foreign Firms	State	Family	Public
90 - 100%	7	1.4	0.0	4.1	33.8	7.7	53.0
75 - 90%	9	21.4	0.0	6.5	11.4	21.5	39.2
50 - 75%	15	21.4	0.0	15.2	8.9	24.0	30.5
25 - 50%	15	2.7	0.0	21.1	0.0	38.3	37.9
10 - 25%	9	18.6	0.0	19.8	0.0	30.9	30.7
0 - 10%	7	13.8	0.0	19.4	0.0	31.9	34.9
All	62	13.3	0.0	15.3	7.6	27.2	36.6

Data Basis: Trend-Verlag

3.4. Board Structure

As discussed in the legal part of this survey, Austrian corporate law provides for a dual-board system. Thereby, the supervisory board is obligatory in case of stock corporations and large companies with limited liability. By contrast, small companies with limited liability are not obliged to maintain a supervisory board. Reich-Rohrwig (1993) reports that only 2.3% of Austrian GmbHs maintain a supervisory board; none of the companies with limited liability in a 1% random sample drawn by Reich-Rohrwig voluntarily installed a supervisory board.

3.4.1. The Board-Structure of the 600 largest Austrian Companies

A common share has value for two reasons: (1) it is an ownership claim on the dividends paid by the firm, and in the case of its liquidation on the value of its assets, and (2) it confers a right to vote on certain organizational and strategic corporate decisions. It is the latter point to which we now turn: We hold the view that the structure of ownership is only one, albeit important, dimension of corporate governance. Crucial is what these ownership claims imply for the governing of companies. There are two options available for shareholders to express dissatisfaction with current management, the exit and the voice option, that is shareholders can simply sell their shares and exit the company or they can cast their votes on the general assembly and/or, perhaps more effectively, take part in corporate decisionmaking by holding seats on the supervisory board. As a first step in assessing the importance of the board of directors, tables 10 to 12 describe the board structures of the 600 largest Austrian companies.

Table 10 breaks down board size by sale size classes. 395 out of the 600 firms do have a supervisory board. Of course, all firms employ at least one manager. On average, the supervisory board constitutes 6.9 for those firms that have a supervisory board (4.5 members averaged over all companies). The total size of this board increases nearly monotonically with size as measured by sales. The management board consists of 3 members on average, and the total size of this board is more or less evenly distributed across size classes.

Table 11 gives a breakdown of total board size by standardized legal forms. As could be expected from the size distributions of table 1, on average supervisory boards in stock corporations are largest followed by companies with limited liability. Non corporate legal forms rarely have a supervisory board.

Variation of the size of the management board across legal forms is very limited with the possible exception of Cooperatives (which have larger than average management boards). Table 12 describes differences in total board sizes across ownership categories. A firm is classified as a state, bank, foreign firm or family company if the ultimate ownership of the respective category is the largest across investor categories. Evidently, state and bank controlled firms have the largest, firms under foreign or family control the smallest mean number of people sitting on the supervisory board. Again, no large differences arise with respect to the total size of the management board across firm size classes.

Table 10: Total Size of Boards by Size Classes
(Average Number of People)

Size Classes by Sales	Boards		
	Supervisory Board		Management Board
	All firms	Firms with s.b.	
95 - 100%	8.8	10.2	3.8
90 - 95%	6.9	7.9	2.8
75 - 90%	5.6	6.9	3.4
50 - 75%	5.1	7.1	3.0
25 - 50%	3.7	6.0	3.0
10 - 25%	2.9	5.7	2.9
5 - 10%	3.7	6.5	2.6
0 - 5%	2.4	6.0	2.7
All	4.5	6.9	3.0

Data Basis: Trend-Verlag

Table 11: Total Size of Boards by Legal Form
(Average Number of People)

Legal Form	Supervisory Board		Management Board
	All firms	Firms with s.b.	
AG	7.2	7.6	3.1
GmbH	3.2	6.1	2.9
Gen	2.9	3.3	5.1
GmbH&CoKG	1.1	7.0	3.4
KG, OHG	0.5	4.3	2.9
All	4.5	6.9	3.0

Data Basis: Trend-Verlag

Table 12: Total Size of Boards by Investor
(Average Number of People)

Investor Categories	Supervisory Board		Management Board
	All firms	Firms with s.b.	
State	8.6	9.7	2.9
Banks	7.5	7.9	3.5
Domestic Firms ¹	5.3	7.0	3.0
Foreign Firms	3.9	5.8	3.2
Family	3.3	6.0	3.0

¹ Direct Ownership > 0

Data Basis: Trend-Verlag

3.4.2. The influence of ownership on supervisory board size

To assess whether state and bank ownership is causal for the observed larger supervisory boards, regression analysis is needed to control for other influencing factors as firm size and chosen legal form. In tables 13 and 14 the number of members of the supervisory board (SUP) is regressed on the logarithms of sales (LNSAL95) and employees (LNEMP95) in 1995 and dummies for the legal forms AG, GmbH, GmbH&CoKG, GEN, and the non corporate legal forms in the sample (PERS). In addition, dummies for bank (DBANK), state (DSTATE), and family (DFAM) ultimate controlling ownership²² are included. By leaving out the foreign controlled firms dummy, the coefficients of DBANK, DSTATE, and DFAM measure the differential effects of these ownership categories to foreign controlled firms concerning the number of people on the supervisory board. In table 13 all firms (600), in table 14 only those firms that have a supervisory board are included (395)²³.

As can be seen from the OLS cross section estimates in the second and third column of table 13, state and bank controlled firms have significantly more supervisory board members than foreign controlled firms (and domestic family controlled firms) holding the size and legal form of the company fixed. In particular, for given size and legal form, state controlled firms employ on average 3.9 members (with a t statistic of 9.66!), bank dominated firms 2.3 members more than foreign controlled firms on the supervisory board. The adoption of the legal form AG greatly increases the size of the supervisory board. Sales and employment cross sectional variation approximately equally determines supervisory board variation as would be expected by the legal provisions.

To account for the discrete nature of the dependent variable (which is a nonnegative count variable) columns 4 to 6 of table 13 report Poisson Maximum Likelihood estimates. The basic conclusions of the OLS regression are replicated: ultimate state and bank control significantly increases the size of the supervisory board by 82% and 47%, respectively, relative to foreign controlled firms as measured by the incidence rate ratios (IRR²⁴).

²² As before, ultimate controlling ownership is attributed to that investor category whose ultimate ownership stake in a given firm is the largest across investor categories with the exception public ownership. As nearly all (even listed) firms in the sample have (at least) one controlling large shareholder our approach seems justified. For example, if a bank holds 40 % of the stakes and the rest is in public ownership the firm is classified as ultimately controlled by the bank and a dummy with value 1 is assigned to the category "bank" and 0 to the other investor categories.

²³ This avoids a preponderance of zeros in the dependent variable SUP. As larger firms are more likely to have a supervisory board this also reduces possible heteroscedasticity in the residuals.

²⁴ The incidence rate ratio is defined as e^b , where b is the estimated coefficient.

Domestic family control significantly reduces board size. The Poisson estimates further reveal that the size of the supervisory boards of GmbHs and GENs are half of those of AGs. The noncorporate legal forms in the sample reduce board size to 23% (GmbH&CoKG) and 7% (all other noncorporate legal forms), respectively, of AG average board size. The employment variable dominates sales as the size influence measure. Unfortunately, the null hypothesis of a Poisson distribution of the data is rejected at a very high significance level by the $\chi^2(590)$ test. Therefore, we rerun our supervisory board regressions with only those firms that have a supervisory board.

Table 14 shows that the basic conclusions are not altered. State and bank control significantly increases the size of supervisory boards, as does the legal form AG. The remarkable stability of results²⁵ gives us great confidence in these findings. Interesting is the dominance of the sales to the employment cross sectional variation in explaining cross sectional supervisory board size variation for those firms that have a supervisory board. This could mean that once a given firm size threshold is surpassed (installation of a supervisory) turnover becomes the relevant size measure.

Similar conclusions follow from the Poisson estimates in table 14. Now, the null hypothesis of a Poisson distribution is not rejected by the $\chi^2(385)$ test.

Back of the envelope calculations²⁶ suggest that in the 89 supervisory boards where the state is ultimately the largest shareholder 325 people are "too much" as compared to foreign controlled firms. The 40 bank controlled firms carry an overload of 60 supervisory board members. Two alternative explanations can be offered for these findings. First, the state represents many heterogeneous groups. This is especially so in Austria's system of so-called "Social Partnership", where social partners such as the chamber of commerce, the chamber of labor etc. actively influence government decisions. Symmetric information flows to these interest groups secured by broad representation on supervisory boards may improve cooperation between the social partners – a desirable goal from the government's perspective. Second, there is the suspicion that the large supervisory boards do neither improve the monitoring efficiency of the corporations nor improve the cooperation between social partners but are merely ways to provide persons close to the political parties with financial rewards. Further research on this question is necessary to arrive at sound conclusions.

²⁵ Although the sample size is increased by more than one third, coefficient estimates of the state and bank dummies do not change by much.

²⁶ Using the conservative OLS estimates of table 14.

Table 13: Regression Analysis:
The Determinants of the Number of People on the Supervisory Board
(All firms: 600)

Independent Variables:	Dependent variable: SUP				
	Estimation Method				
	OLS		Poisson Maximum Likelihood		
	Coeff	t-Value	Coeff	z	IRR ¹
Constant	-0.27	0.21	0.76	4.40***	-
LNSAL95	0.40	2.09**	0.02	0.65	1.02
LNEMP95	0.47	3.51***	0.13	5.35***	1.13
GmbH	-2.91	10.20***	-0.61	14.19***	0.54
GmbH&CoKG	-4.16	6.17***	-1.49	7.74***	0.23
GEN	-2.93	2.60***	-0.62	2.95***	0.54
PERS	-5.00	7.49***	-2.64	7.87***	0.07
DBANK	2.25	4.00***	0.38	5.42***	1.47
DSTATE	3.88	9.66***	0.60	11.51***	1.82
DFAM	-0.48	1.64	-0.15	3.02***	0.86
R ² -bar	0.45				
Pseudo R ²	-		0.24		
Goodness of fit $\chi^2(590)$	-		1763.3		
Prob > $\chi^2(590)$	-		0.00		
No. Obs.	600		600		
DF	590		590		

¹ incidence rate ratio
*** significant at the 1% level
** significant at the 5% level
* significant at the 10% level

Table 14: Regression Analysis:
The Determinants of the Number of People on the Supervisory Board
(Included are only firms that have a supervisory board: 395)

Independent Variables:	Dependent variable: SUP				
	Estimation Method				
	OLS		Poisson Maximum Likelihood		
	Coeff	t-Value	Coeff	z	IRR ¹
Constant	-0.12	0.09	0.97	5.50***	-
LNSAL95	0.57	3.03***	0.09	3.02***	1.09
LNEMP95	0.25	1.51	0.03	1.28	1.03
GmbH	-1.31	4.54***	-0.19	4.57***	0.83
GmbH&CoKG	-0.21	0.15	-0.03	0.14	0.97
GEN	-3.49	3.34***	-0.73	3.44***	0.48
PERS	-2.16	1.12	-0.40	1.18	0.67
DBANK	1.49	2.84***	0.22	3.15***	1.25
DSTATE	3.65	9.56***	0.47	9.33***	1.61
DFAM	0.05	0.17	0.02	0.72	1.02
R ² -bar	0.33				
Pseudo R ²	-		0.10		
Goodness of fit $\chi^2(385)$	-		374.4		
Prob > $\chi^2(385)$	-		0.64		
No. Obs.	395		395		
DF	385		385		

¹ incidence rate ratio
*** significant at the 1% level
** significant at the 5% level
* significant at the 10% level

4. Conclusions

This study gives an overview over the structure of corporate governance in Austria. Several main observations were made.

- The corporate sector in Austria is characterized by a large number of small and medium-sized corporations which are mainly in the legal form of sole proprietorships, trade-corporations with unlimited liability, and companies with limited liability. For these corporations there is no significant separation between ownership and control.
- The larger firms choose either the legal form of a company with limited liability or that of a stock corporation. Even here we find that ownership concentration is extremely high by international standards. In our sample of the 600 largest corporations, the average size of the largest stake is above 80%!
- When we distinguish between the main types of owners (e.g. individuals/families, foreign investors, state,...), we find that families are important owners of companies of smaller size whereas the state and financial institutions are predominant players in the corporate governance of the larger firms.
- A significant fraction of banks and insurance companies is effectively ownerless. Savings banks are usually dominated by municipalities so that the political influence in the banking sector and, via ownership claims in non-financial firms, in the whole economy is significant.
- For stock corporations, large companies with limited liability, cooperatives and savings banks the law requires a dual board structure. The size of the supervisory board increases with the size of the company but also depends on the ownership structure. In particular, we find that the size of the board increases significantly when the major shareholder is the state.

A number of interesting questions arise as a consequence of these observations. First, does the identity of the major owner of a company affect corporate decisions in a systematic way? For example, we might expect differences depending on whether or not the major owner is a bank, a family, or the state. In particular, a bank has its own agency problems and might therefore not be as effective a monitor as a private owner. In addition, a bank may also grant loans to the firm and therefore its incentives in corporate governance may differ from those of a pure equityholder.

Second, within the banking sector a number of interesting questions arise. The fact that a major fraction of the banks is effectively ownerless should be explored in detail. Do a bank's profitability and operating decisions depend on its respective governance structure?

Third, it would be interesting to explore the structure of supervisory boards and their influence on firm performance more carefully. For example, what are the consequences of workers' representation on the board? How does the composition of the board members depend on the

respective ownership structure? Are there performance differences due to the composition of boards?

A fruitful extension of current work are international comparisons. Here, Austria's extreme concentration of ownership on the one hand and the fact that a major segment of the financial sector is ownerless on the other hand would provide an interesting benchmark against which other systems of corporate governance should be compared.

Appendix A: Legal Forms

(1) Non corporate legal forms:

- Sole Proprietorship (Einzelkaufmann)
- Civil Law Partnerships (Gesellschaft bürgerlichen Rechts or short GesbR)
- General Partnerships (Offene Handelsgesellschaft or short OHG)
- Limited Partnerships (Kommanditgesellschaft or short KG)
- Small Registered Partnerships (Offene Erwerbsgesellschaft or short OEG)
- Small Registered Limited Partnerships (Kommandit-Erwerbsgesellschaft or short KEG)
- Silent Partnerships (Stille Gesellschaft)
- European Economic Interest Grouping
(Europäische Wirtschaftliche Interessenvereinigung or short EWIV)

(2) Corporate Legal Forms:

- Companies with limited liability (Gesellschaft mit beschränkter Haftung or short GmbH)
- Stock Corporations (Aktiengesellschaft or short AG)

(3) Other corporate Legal Forms:

- Commercial Cooperatives (Erwerbs- und Wirtschaftsgenossenschaften)
- Mutual Insurance Associations (Versicherungsvereine auf Gegenseitigkeit or short VVaGs)

(4) Other Legal Entities:

- Saving Banks (Sparkassen)
- Privat Foundations (Privatstiftung)